

# MONTHLY WEATHER REVIEW.

Editor: Prof. CLEVELAND ABBE.

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## INTRODUCTION.

The MONTHLY WEATHER REVIEW for March, 1900, is based on reports from about 3,103 stations furnished by employees and voluntary observers, classified as follows: regular stations of the Weather Bureau, 158; West Indian service stations, 12; special river stations, 132; special rainfall stations, 48; voluntary observers of the Weather Bureau, 2,562; Army post hospital reports, 27; United States Life-Saving Service, 9; Southern Pacific Railway Company, 96; Canadian Meteorological Service, 32; Mexican Telegraph Service, 20; Mexican voluntary stations, 7; Mexican Telegraph Company, 3. International simultaneous observations are received from a few stations and used, together with trustworthy newspaper extracts and special reports.

Special acknowledgment is made of the hearty cooperation of Prof. R. F. Stupart, Director of the Meteorological Service of the Dominion of Canada; Mr. Curtis J. Lyons, Meteorologist to the Hawaiian Government Survey, Honolulu; Señor Manuel E. Pastrana, Director of the Central Meteorological and Magnetic Observatory of Mexico; Señor A. M. Chaves, Director-General of Mexican Telegraphs; Mr. Maxwell Hall, Govern-

ment Meteorologist, Kingston, Jamaica; Capt. S. I. Kimball, Superintendent of the United States Life-Saving Service; and Capt. J. E. Craig, Hydrographer, United States Navy.

The REVIEW is prepared under the general editorial supervision of Prof. Cleveland Abbe.

Attention is called to the fact that the clocks and self-registers at regular Weather Bureau stations are all set to seventy-fifth meridian or eastern standard time, which is exactly five hours behind Greenwich time; as far as practicable, only this standard of time is used in the text of the REVIEW, since all Weather Bureau observations are required to be taken and recorded by it. The standards used by the public in the United States and Canada and by the voluntary observers are believed to conform generally to the modern international system of standard meridians, one hour apart, beginning with Greenwich. Records of miscellaneous phenomena that are reported occasionally in other standards of time by voluntary observers or newspaper correspondents are sometimes corrected to agree with the eastern standard; otherwise, the local meridian is mentioned.

## FORECASTS AND WARNINGS.

By Prof. E. B. GARRETT, in charge of Forecast Division.

The heavy snowstorm of February 28 in the interior of New York and over the lower Lake region continued during March 1 and extended over central and northern New England. Timely warnings of this storm proved of great value to the public. The second heavy and general snowstorm of the month visited the Great Lakes on the 4th and 5th. This storm resulted in a partial blockade of railroads in Wisconsin and Michigan. All transportation lines had, however, been warned of its approach and prepared for the emergency. In northern Illinois and northern Indiana heavy snow, sleet, and rain seriously interfered with traffic. On the 15th heavy snow fell in the Middle Atlantic and New England States and the upper Ohio Valley, and light snow in the interior of the Gulf and South Atlantic States. All interests in the Middle Atlantic and New England States were notified the morning of the 15th that heavy snow and increasing northeast winds were indicated for the afternoon and night of that date from the upper Ohio Valley over the Middle Atlantic and south New England States and the lower Lake region. On the 5th snow fell to a depth of 3 to 5 inches at Salt Lake City, Utah. During the 14th heavy snow was reported in northern New Mexico. On the 19th snow fell in the mountains of southern California.

On March 1 severe gales prevailed along the Middle Atlantic and south New England coasts, and on the 2d easterly gales, high tides, and heavy rain caused considerable damage on the Maine coast. High winds attended the snowstorm of the 15th in the Atlantic coast States. Heavy gales, the se-

verest of the season, prevailed on the north Pacific coast during the afternoon and night of the 7th.

The Atlantic coast storm of the 1st and 2d was followed by a marked fall in temperature in the South Atlantic and Gulf States during the night of the 1st, and on the morning of the 2d heavy frost occurred at Mobile, Ala., light frost at New Orleans, La., and Jacksonville, Fla., and killing frost in the interior of the middle and east Gulf and South Atlantic States. The heavy snow in the Lake region on the 4th and 5th was followed by a cold wave and high winds in that section. Light and heavy frost occurred in southern California on the 6th and 7th. During the 15th and 16th a cold wave swept east and southeast over the Great Lakes, and killing frost again occurred in the South Atlantic and the interior of the east Gulf States on the morning of the 17th, with light frost as far south as Jacksonville, Fla. Warnings of frost in the north Pacific coast States were issued on the 12th, 13th, 20th, and 27th, all of which were justified. Frost occurred in the east Gulf States on the 31st. Warnings of the cold waves and frosts of the month were given the widest possible distribution in the threatened districts. In the Central and Northern States vegetation was not sufficiently advanced to suffer injury from cold. In the Southern States, and especially in Alabama, the frost warning of the 31st saved a large portion of the strawberry crop.

During the early days of March flood conditions prevailed in the Hudson River and tributaries, and on the 13th the water was high in the rivers of Illinois.